

Fourth industrial revolution and the paradigm change in engineering education

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Abstract

© The Authors, published by EDP Sciences, 2018. The article discusses the main features of the fourth industrial revolution and its impact on the transformation of the labor market and the transition to a new paradigm of education. Authors analyze new requirements for the graduates competence and modern world educational trends. Much attention is paid to strengthening of the project nature of education, blurring the distinction between traditional technical and humanitarian education. Moreover, the authors examine the shift of engineering work with its basic elements-invention, engineering, and design in the field of technical engineering in the area of economic, financial, social, cultural, anthropological design. This requires the creation of new interdisciplinary courses, the revision of the classical approaches to engineering and humanitarian education. The article explores the personalization of the educational trajectories, artificial intelligence as a teacher, e-learning technologies and simulators, information educational environment.

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